

FIG.1

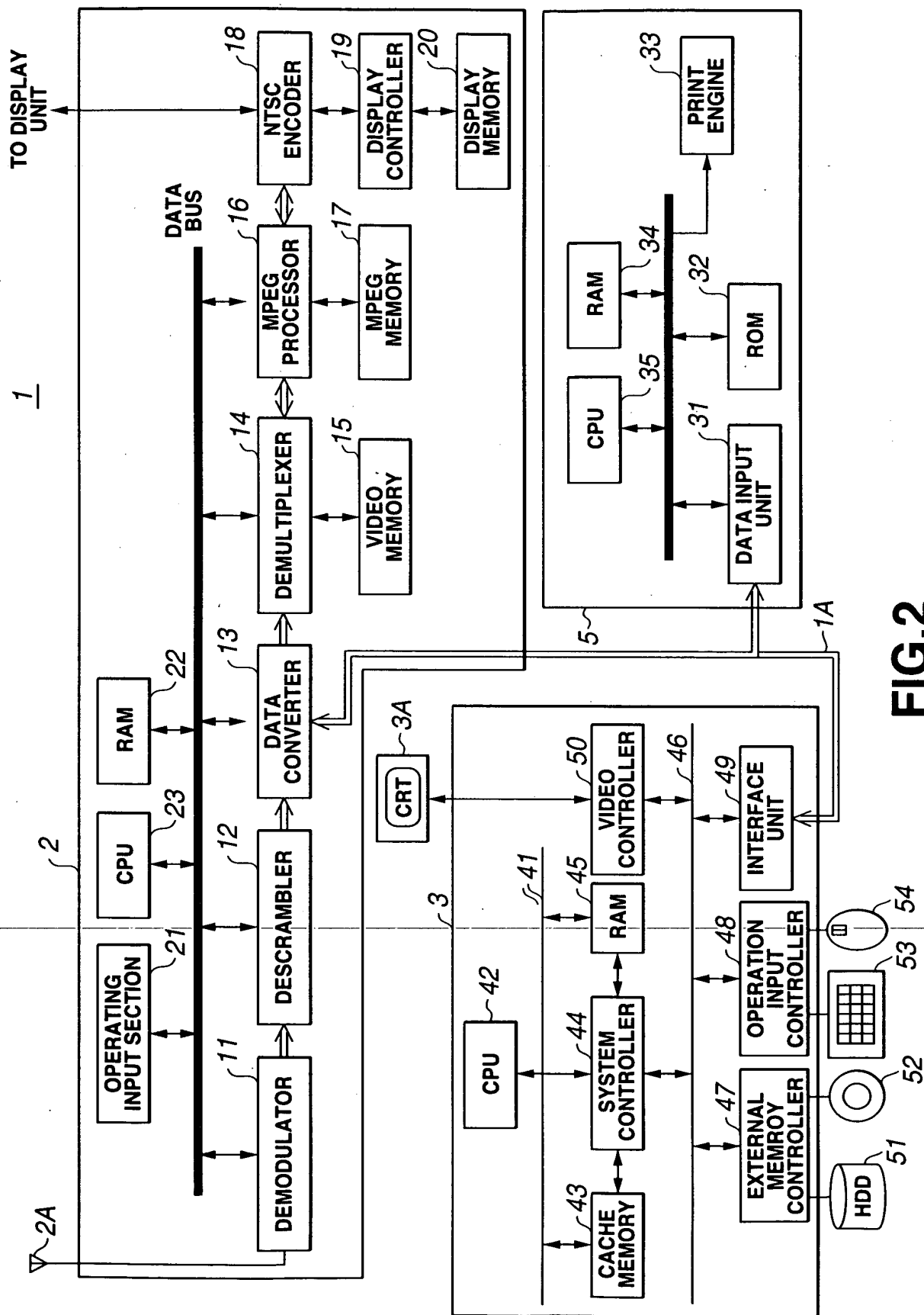


FIG.2

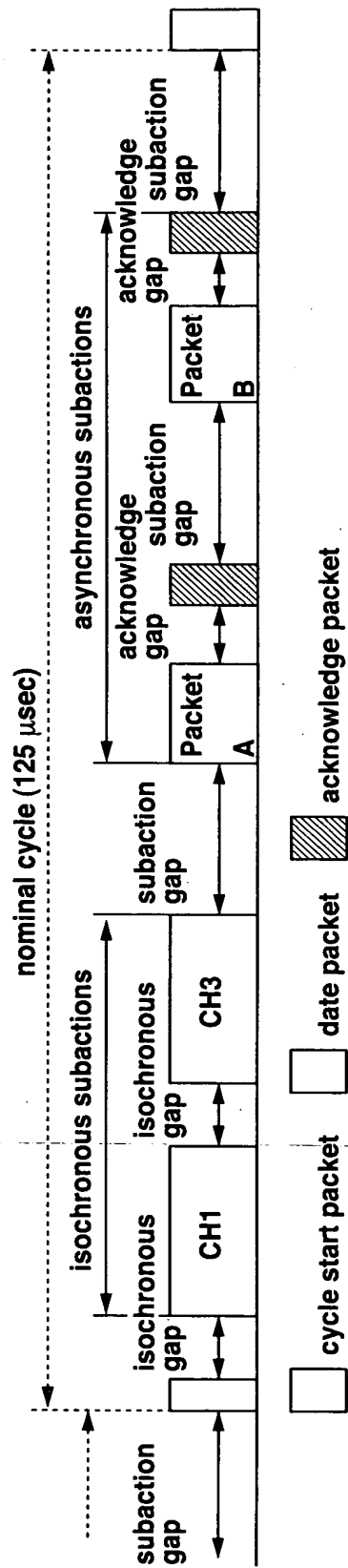


FIG.3

FIG. 4

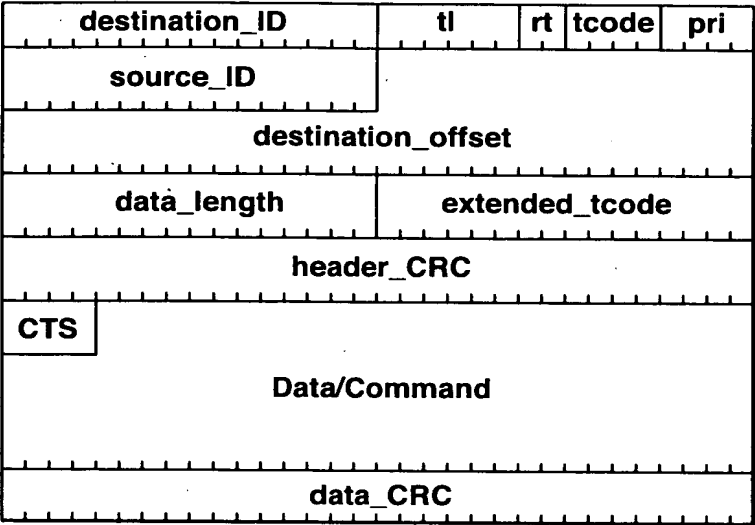


FIG.4

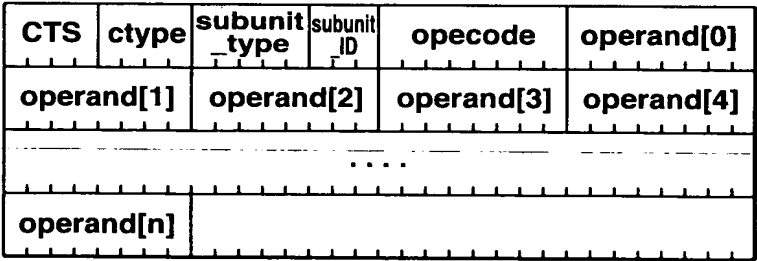


FIG.5

	msb						lsb
opcode	OPERATION MODE(41 ₁₆)						
operand [0]	subfunction						
operand [1]	status						
operand [2]	next_pic						
operand [3]	next_page						
operand [4]							
operand [5]	print_job_ID						
⋮							
operand [16]							
operand [17]	Operation_mode_parameters						
⋮							
operand [24]							
operand [25]	Operation_mode_optional_parameters						
⋮							
operand [29]							
operand [30]	reserved						
operand [31]							
operand [32]							

FIG.6

00000000 00000000

Address Offset	Contents
00 ₁₆	media_type
01 ₁₆	Media_size
02 ₁₆	
03 ₁₆	
04 ₁₆	reserved
05 ₁₆	Print_quality
06 ₁₆	Mono_color
07 ₁₆	offset
08 ₁₆	
09 ₁₆	
0A ₁₆	
0B ₁₆	Layout_type
0C ₁₆	
0D ₁₆	
0E ₁₆	

FIG.7

	msb						lsb
opcode	CAPTURE(42 ₁₆)						
operand [0]	subfunction						
operand [1]	source_subunit_type					source_subunit_ID	
operand [2]	source_plug						
operand [3]	status						
operand [4]	dest_plug						
operand [5]	print_job_ID						
:							
operand [16]							
operand [17]	data_size						
operand [18]							
operand [19]							
operand [20]							
operand [21]	image_size_x						
operand [22]							
operand [23]	image_size_y						
operand [24]							
operand [25]	image_format_specifier						
operand [26]							
operand [27]	reserved						
operand [28]							
operand [29]							
operand [30]	Next_pic						
operand [31]	Next_page						
operand [32]							

FIG.8

Value(MSB)	Value(LSB)	Type	Meaning
00 ₁₆	sRGB raw		
	00 ₁₆	sRGB raw	
	01 ₁₆	sRGB raw,quadlet	
01 ₁₆	YCC raw		
	0X ₁₆	YCC4:2:2 raw/pixel	
	1X ₁₆	YCC4:2:2 raw/line	
	8X ₁₆	YCC4:2:0 raw/pixel	
	9X ₁₆	YCC4:2:0 raw/line	
	X0 ₁₆	Pixel ratio 1.00×1.00 / ITU-R BT.709-2 / interlace	
	X1 ₁₆	Pixel ratio 1.19×1.00 / ITU-R BT.709-2 / interlace	
	X2 ₁₆	Pixel ratio 0.89×1.00 / ITU-R BT.709-2 / interlace	
	X3 ₁₆	Pixel ratio 0.89×1.00 / ITU-R BT.601-4 / interlace	
	X8 ₁₆	Pixel ratio 1.00×1.00 / ITU-R BT.709-2 / progressive	
	X9 ₁₆	Pixel ratio 1.19×1.00 / ITU-R BT.709-2 / progressive	
	XA ₁₆	Pixel ratio 0.89×1.00 / ITU-R BT.709-2 / progressive	
	XB ₁₆	Pixel ratio 0.89×1.00 / ITU-R BT.601-4 / progressive	
10 ₁₆	DCF Object		
	00 ₁₆	Exif 2.1	
	01 ₁₆	JFIF	
	02 ₁₆	TIFF	
	0F ₁₆	JPEG	

FIG.9

FIG.10

Value (MSB)	Value (LSB)	Type	Meaning
	20 ₁₀	PDS	
	21 ₁₀	IGP	(Printronix Corp.)
	22 ₁₀	CodeV	Magnum Code-V, Image and printer control language (QMS, Inc)
	23 ₁₀	DSC-DSE	Data Stream Compatible and Emulation Bi-directional print data stream for non-SNA (DSC) and SNA LU-3 3270 controller (DSE) communications (IBM)
	24 ₁₀	WPS	Windows Printing System (Microsoft Corporation.)
	25 ₁₀	LN03	Early DEC-PPL3 (Digital Equipment Corp.)
	26 ₁₀	CCITT	
	27 ₁₀	QUIC	Quality Information Code (QMS, Inc)
	28 ₁₀	CPAP	Common Printer Access Protocol (Digital Equipment Corp.)
	29 ₁₀	DEC-PPL	Digital ANSI-Compliant Printing Protocol (Digital Equipment Corp.)
	30 ₁₀	Simple Text	character coded data, including NUL, CR, LF, HT, and FF control characters, (See ISO 10175 Document Printing Application (DPA)) (ISO Standard)
	31 ₁₀	NPAP	Network Printer Alliance Protocol (This protocol has been superseded by the IEEE 1284.1 TIPS1 Std (ref, TIPS1=49 ₁₀))
	32 ₁₀	DOC	Document Option Commands (QMS, Inc)
	33 ₁₀	ImPRESS	(QMS, Inc)
	34 ₁₀	Pinwriter	24 wire dot matrix printer for USA, Europe, and Asia except Japan. (NEC)
	35 ₁₀	NPDL	Page printer for Japanese market (NEC)
	36 ₁₀	NEC201PL	PC-PRO201 Series: Serial printer language used in the Japanese market. (NEC)
	37 ₁₀	Automatic PDL sensing	Automatic sensing of the interpreter language family by the printer examining the document content. Which actual interpreter language families are sensed depends on the printer implementation.
	38 ₁₀	Pages	Page printer Advanced Graphic Escape Set (IBM Japan)
	39 ₁₀	LIPS	LBP Image Processing System

FIG.11

Value (MSB)	Value (LSB)	Type	Meaning
	40 ₁₀	TIFF	Tagged Image File Format (Aldus)
	41 ₁₀	Diagnostic	A hex dump of the input to the interpreter
	42 ₁₀	PSPrinter	The PostScript Language used for control (with any PDLs) (Adobe Systems Incorporated)
	43 ₁₀	CaPSL	Canon Print Systems Language (Canon Inc.)
	44 ₁₀	EXCL	Extended Command Language (Talaris Systems Inc.)
	45 ₁₀	LCDS	Line Conditioned Data Stream (Xerox Corporation)
	46 ₁₀	XES	Xerox Escape Sequences (Xerox Corporation)
	47 ₁₀	PCLXL	Printer Control language.Extended language features for printing,and printer control. (Hewlett-Packard Co.)
	48 ₁₀	ART	Advanced Rendering Tools (ART IV) (Fuji Xerox Co.,Ltd.)
	49 ₁₀	TIPSI	Transport Independent Printer System Interface (ref.IEEE Std.1284.1)
	50 ₁₀	Prescribe	Technical reference manual: "PRESCRIBE II Programming Manual"
	51 ₁₀	LinePrinter	A simple-text character stream which supports the control codes LF,VT,FF,and plus Centronics or Dataproducts Vertical Format Unit(VFU) language
	52 ₁₀	IDP	Imaging Device Protocol (Apple Computer.)
	53 ₁₀	XJCL	Xerox Job Control Language (JCL) (Fuji Xerox Co.,Ltd.)
	54 ₁₀	PDF	Adobe Portable Document Format (Adobe Systems,Inc.)
	55 ₁₀	RPDL()	Ricoh Page Description Language for printers (RICOH,Co.LTD)
	56 ₁₀	IntermecIPL	Intermec Printer Language for label printers (Intermec Corporation)
	57 ₁₀	UBIFingerprint	An intelligent basic-like programming language for label printers. (United Barcode Industries)
	58 ₁₀	UBIDirectProtocol	An intelligent control language for label printers. (United Barcode Industries)
	59 ₁₀	Fujitsu Printer Language	(FUJITSU LIMITED)
80 ₁₆ ~8F ₁₆	59 ₁₆ ~FF ₁₆	Vendor Dependent format	
FE ₁₆	Special meaning		
	00 ₁₆	Unit Plug defined	
	01 ₁₆	Don't care	

FIG.12

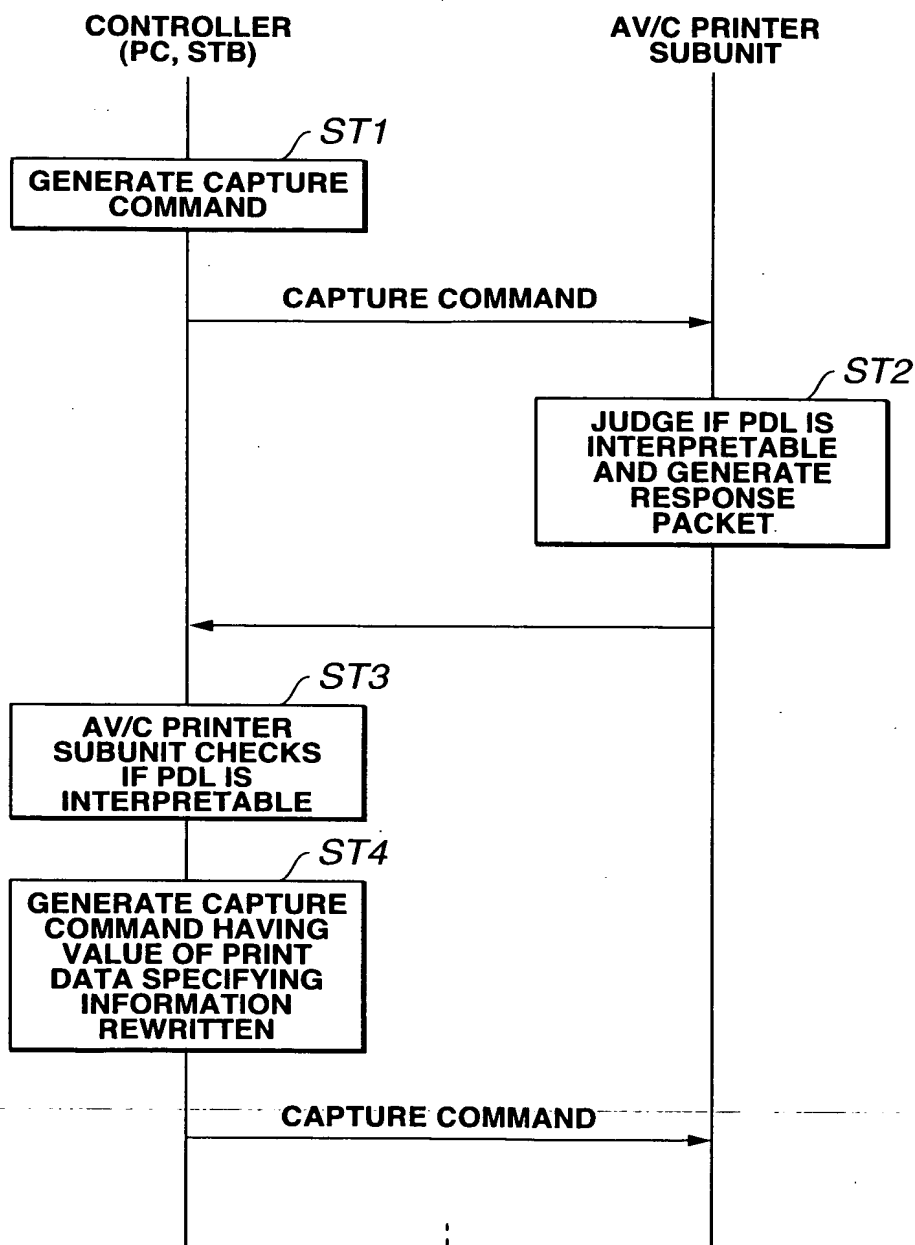


FIG.13

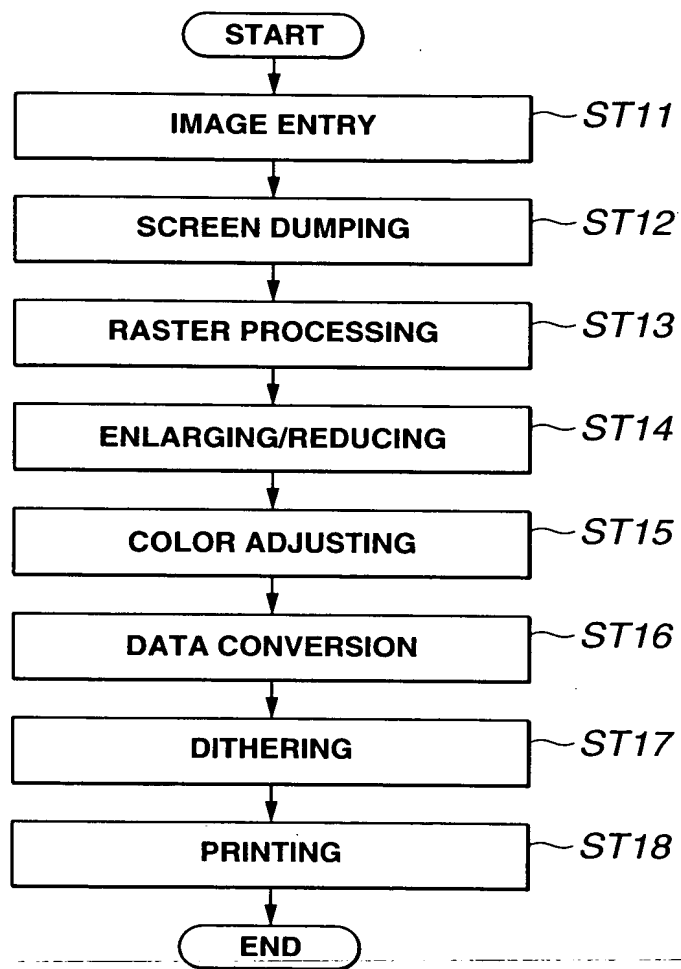


FIG.14

START



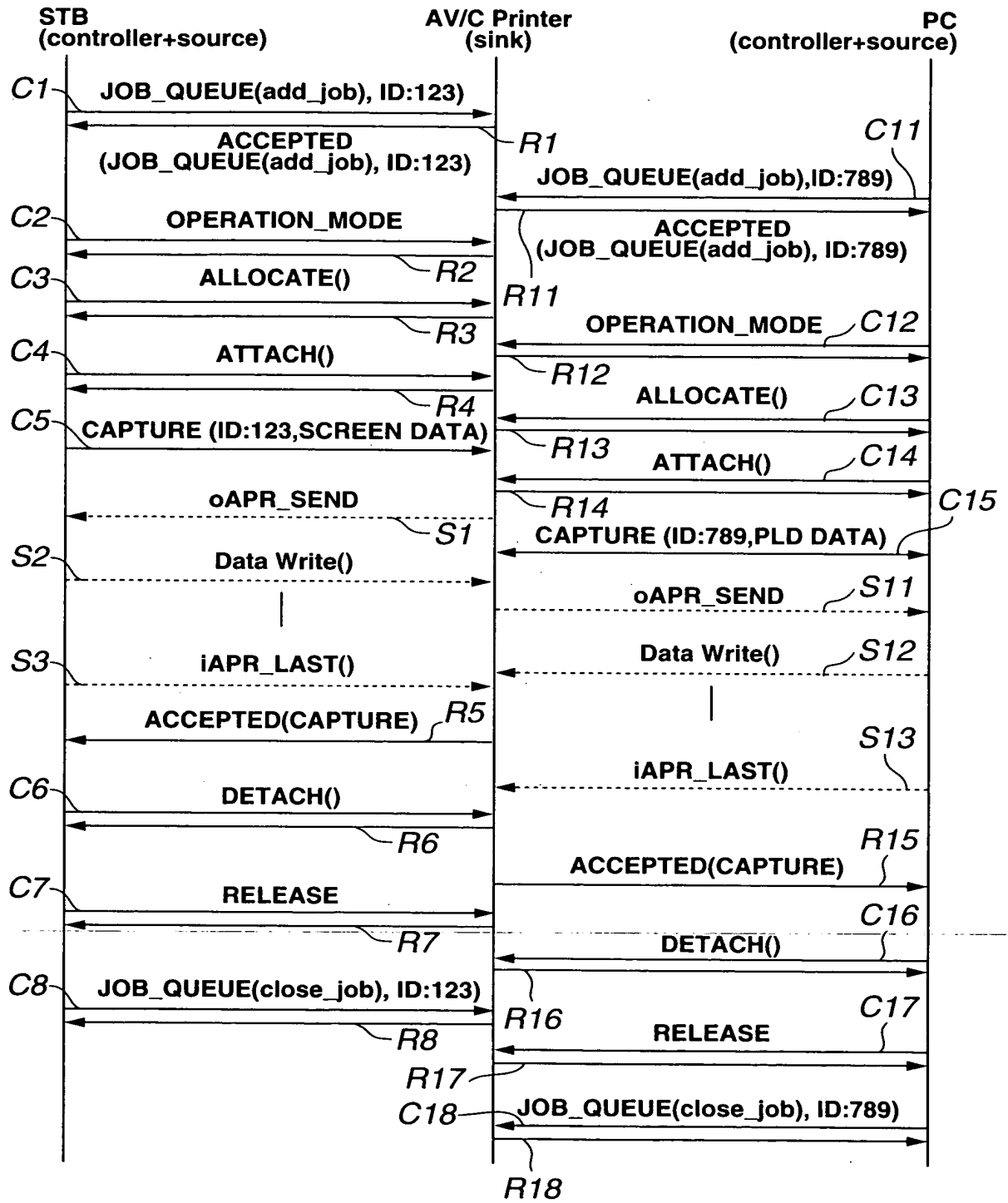


FIG.16

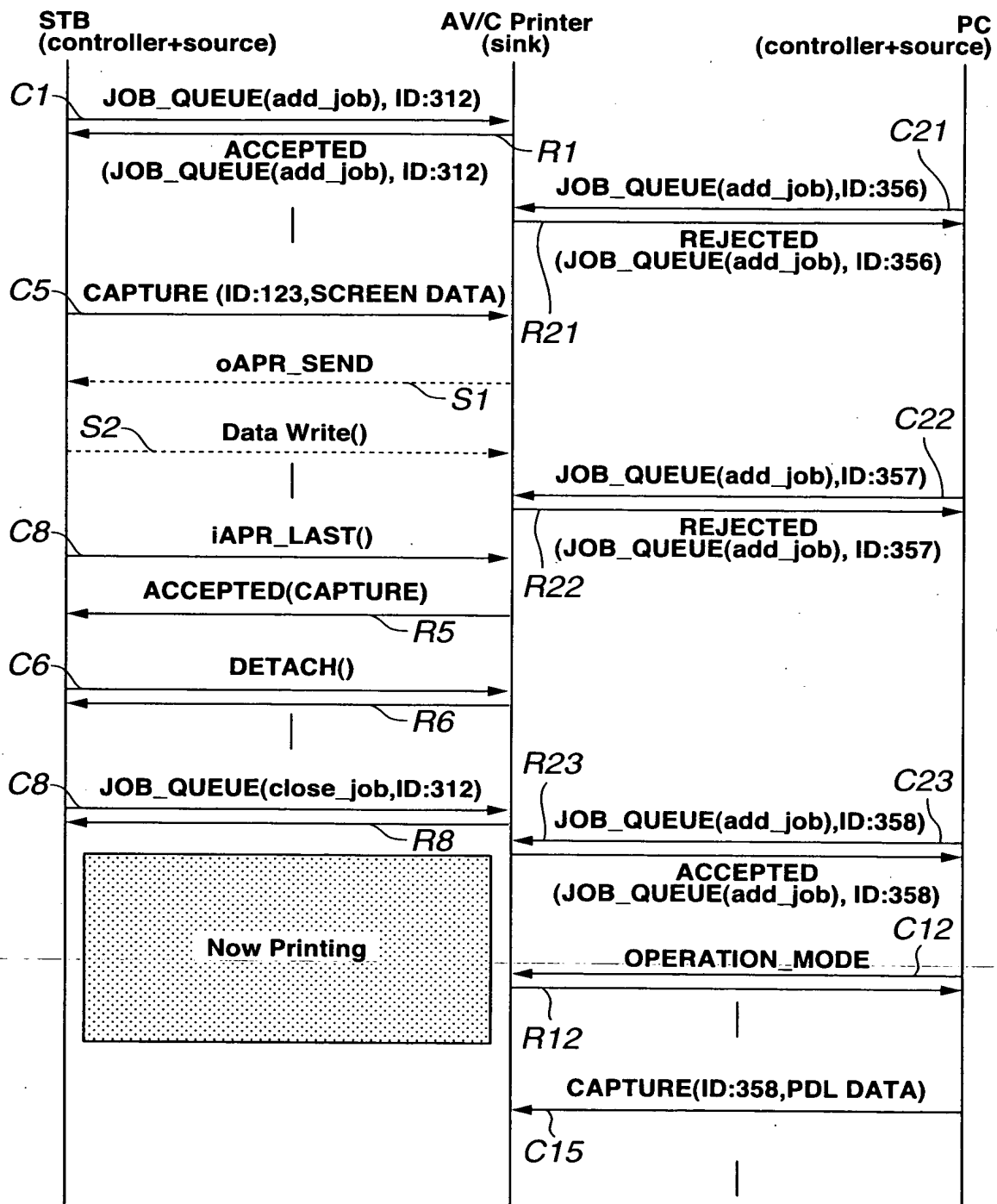


FIG.17


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sequenceDiagram
    participant STB as STB  
(controller+source)
    participant AV as AV/C Printer  
(sink)
    participant PC as PC  
(controller+source)

    STB->>AV: C1 JOB_QUEUE(add_job), ID:456
    AV->>STB: R1 ACCEPTED  
(JOB_QUEUE(add_job), ID:456)
    STB->>PC: C5 CAPTURE (ID:0,SCREEN DATA)
    PC->>AV: C31 JOB_QUEUE(add_job),ID:800
    AV->>PC: R31 REJECTED  
(JOB_QUEUE(add_job), ID:800)
    STB->>AV: S2 Data Write()
    AV->>STB: S1 oAPR_SEND
    STB->>PC: C8 JOB_QUEUE(close_job,ID:456)
    PC->>AV: C32 JOB_QUEUE(add_job),ID:802
    AV->>PC: R32 REJECTED  
(JOB_QUEUE(add_job), ID:802)
    STB->>AV: R8 Now Printing
    PC->>AV: C33 JOB_QUEUE(add_job),ID:804
    AV->>PC: R33 REJECTED  
(JOB_QUEUE(add_job), ID:804)
    PC->>AV: C34 JOB_QUEUE(add_job),ID:806
    AV->>PC: R34 ACCEPTED  
(JOB_QUEUE(add_job), ID:806)
    PC->>AV: C12 OPERATION_MODE
    AV->>PC: R12 CAPTURE(ID:806,PDL DATA)
    PC->>AV: C15

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FIG. 18

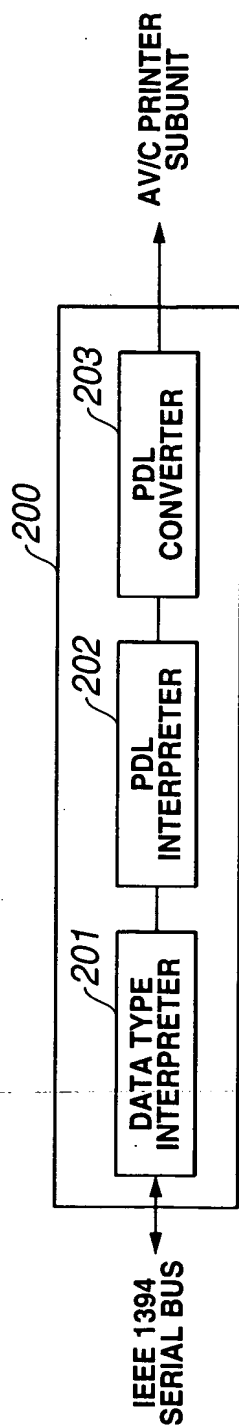


FIG.19